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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/751,188

12/30/2003

Hideki Nakata

10873.1369US01

3394

53148

7590

12/26/2007

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

12/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/751,188	Applicant(s) NAKATA ET AL.	
	Examiner Aristotelis M. Psitos	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-8,11-13,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4-8,11-13,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicants' response of 12/3/07 has been considered with the following results.

The arguments filed have been entered. Since they overcome the previous rejection, and further the prosecution, the FINALITY of the previous OA is withdrawn and the following action is taken.

No art is applied against this claim.

Claim Objections

Claim 16 is objected to because of the following informalities: The limitation, as interpreted by the examiner appears to contradict the parent claim 15, in that the first and second optical films, elements 40 and 41 respectively in figure 22A do intersect at their vertex. Further explanation is respectfully required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 2,4-7,11,13 and 15 rejected under 35 U.S.C. 102(b) as being anticipated by Hasman et al.

The following analysis is made.

Claim 1.

Hasman et al

An optical head comprising:

yes – inherent in reference

First light source ---

see λ 1 – 4 for instance

Second light source ---

and disclosure thereof.

Third light source -----

Note figures 2/3

A beam splitter

see discussion of

Dichroic beam splitter/prisms 38,41,
37, 40 in figure 3.

1st, 2nd, 3rd, prisms

see first – third prisms in Hasman et al

1st, 2nd, 3rd, films

see description of the films starting at

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3. Resolving the level of ordinary skill in the pertinent art.
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1. Claims 2,4-7,11,13 and 15 rejected under 35 U.S.C. 102(b) as being anticipated by Hasman et al.

The following analysis is made.

Claim 1.	Hasman et al
An optical head comprising:	yes – inherent in reference
First light source ---	see λ 1 – 4 for instance
Second light source ---	and disclosure thereof.
Third light source -----	Note figures 2/3
A beam splitter	see discussion of Dichroic beam splitter/prisms 38,41, 37, 40 in figure 3.
1 st , 2 nd , 3 rd , prisms	see first – third prisms in Hasman et al
1 st , 2 nd , 3 rd , films	see description of the films starting at

Col. 5 line 40.

The above Hasman et al reference discloses a multi wavelength optical rec/repr system.

With respect to claims 2,4-5 all such limitations are considered present, i.e., triangular/hexahedral beam splitter – prism – dichoric splitter/prism with appropriate films at the required planar positions in order to perform the overall splitting functions, as well as the wavelength selections.

With respect to the functional limitations of claims 6 and 7 such are considered met by the above reference, the filter layers perform the desired functions upon the desired wavelengths in order to combine the incoming signals.

With respect to claim 11, this is not interpreted as a manufacturing claim, i.e., merely a designation of materials of the beam-splitter, and such is present in the above combined teachings.

With respect to claim 13, such is disclosed in Hasman et al.

Response to Arguments

Applicant's arguments filed 12/3/07 have been fully considered but they are not persuasive.

Applicants' argue with respect to figure 22A in identifying the optical films etc. is greatly appreciated; however, as described in figure 2 of Hasman et al (5526338), such elements are depicted. Hence the examiner concludes that the claimed limitations with respect to those elements are clearly found.

2 Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated in either paragraph 1 above, and further in view of Official notice.

The use of the appropriate filter element in Dichroic beam splitting prism is considered well known in the art, and official notice is taken thereof. Furthermore, the shapes recited in claim 9 are also considered well known and official notice is taken of these limitations as well.

With respect to the placement of the film at the central portion of the beam-splitting device is concerned, since the teaching in the above combined references covers the entire plane incident to the

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incoming wavelength from the laser source, such a limitation is considered an optimization of systems parameter and obvious to one of ordinary skill in the art – see *In re Peterson* 65 USPQ2nd 1379.

3 Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated in paragraph 1 above, and further in view of Opheij.

With respect to the limitation of this claim, Opheij teaches in this environment the ability of providing the collimator/ing lens integral with a prism.

It would have been obvious to modify the base system as relied upon above in paragraph 1 above with the additional teaching from Opheij, motivation is as discussed in Opheij.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arai et al is cited as also illustrative of a multi-beam prismatic arrangement in this environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thru: 6:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Aristotelis M Psitos
Primary Examiner
Art Unit 2627

A handwritten signature in black ink, consisting of a large, stylized 'A' followed by a vertical line and a small flourish at the bottom right.

AMP